32

148824

HRS Score: 50
Site Name: Ford Rd LF
CERCLIS ID No.: OHD 980 510 002

~~SCREENING SITE INSPECTIONS~~
EXPANDED SITE INSPECTIONS**

**TAKEN FROM GUIDANCE FOR PERFORMING SITE INSPECTIONS UNDER CERCLA INTERIM FINAL DATED SEPTEMBER 1992

1) NARRATIVE REPORT INCLUDING

   INTRODUCTION

   SITE DESCRIPTION/REGULATORY HISTORY

   OPERATIONAL HISTORY/WASTE CHARACTERISTICS

   PRESENTATION OF ANALYTICAL DATA

   PATHWAY DISCUSSIONS

   SUMMARY

2) PHOTO DOCUMENTATION

3) TOPOGRAPHIC MAPS INCLUDING 4-MILE AND 15-MILE RADIUS

4) SITE SKETCH

5) SITE LOCATION MAP

6) WELL LOGS

7) OTHER APPENDICES

8) REFERENCES

9) TRANSMITTAL MEMO OR LETTER INDICATING EVENT QUALIFER

10) PREScore Worksheets

11) EPA FORM 2070-13 not required

Reviewer: SG
Date Approved: 1/3/94

8/93

MEMORANDUM

DATE: October 11, 1993

TO: Jeanne Griffin, Ohio Site Assessment Manager
U.S. Environmental Protection Agency (U.S. EPA)

FROM: Gabriel Rood, PRC Environmental Management, Inc. (PRC)

SUBJECT: Expanded Site Inspection (ESI)
Site Name: Ford Road Landfill
Location: Elyria, Ohio
EPA ID No: OHD 980 510 002

CONFIDENTIAL

THIS DOCUMENT IS CONFIDENTIAL. Because of its predecisional nature, this memorandum and the attached draft preliminary Hazard Ranking System (HRS) scoresheets are not to be released to the public.

The DRAFT EXPANDED SITE INSPECTION REPORT accompanies this transmittal memorandum and the draft preliminary HRS scoresheets.

The site has been evaluated to determine the need for immediate removal action as a result of a substantial threat to human health and the environment. PRC recommends the following:

- The site **does** present a threat that requires immediate removal action.

X The site **does not** present a threat that requires immediate removal action.

PRC has prepared the attached draft preliminary HRS site scoresheets for the above-referenced site.

- The draft preliminary HRS score is **below** 28.50.

X The draft preliminary HRS score is **above** 28.50.

Following is a summary of factors affecting the preliminary HRS pathway scores.

WASTE CHARACTERISTICS:

Waste characteristics factor values were calculated based on a hazardous wastestream (Tier B) quantity of 589,330,000 pounds. This yields a maximum waste quantity score of 1,000,000.

GROUNDWATER:

The groundwater pathway is not included with the preliminary scoresheets because the pathway contributes minimally to the overall site score. No drinking water wells are known to exist in northern Lorain County.

SURFACE WATER:

An observed release has been established to surface water through sediment sampling. Toxicity, persistence, and bioaccumulation values are based on PCBs. The surface-water pathway scores the maximum of 100 points, based on an observed release to the Black River and potential human food chain contamination. The Black River is a fishery, with production greater than 0 and less than 100 pounds per year. A surface-water intake serving 76,000 people is located in Lake Erie downstream of the site. However, the dilution weight for the Great Lakes yields a minimal score for this threat. The total miles of wetland frontage along the Black River are small, but a habitat known to be used by a threatened species, the silver lamprey (*Ichthyomyzon unicuspis*), exists within the 15-mile target distance limit.

SOIL EXPOSURE:

The soil exposure pathway score was not included in the preliminary scoresheets because residential and nearby population threats are presumed to be minimal. The surface of the landfill is covered with five to eight feet of clean fill and clay. Only one part-time worker is present on site. Nearby population is sparse. About 2,500 residents live within 1 mile of the site. The nearest resident is 300 feet from the site. The landfill is slightly accessible to the public, but has no recreational use.

AIR:

The air migration pathway was not scored because it adds little to the overall site score. No releases to air of hazardous substances have been reported. The surface of the landfill is covered with five to eight feet of cover and is slightly vegetated. There are about 95,000 residents within four miles of the landfill.

DRAFT PRELIMINARY HAZARD RANKING SYSTEM SCORESHEETS
FOR THE
FORD ROAD LANDFILL SITE
ELYRIA, OHIO

CONFIDENTIAL DOCUMENT

Ford Road Landfill
Elyria, Ohio
OHD 980 510 002

WORKSHEET FOR COMPUTING DRAFT HRS SITE SCORE

		Pathway Score (S)	Pathway Score Squared (S^2)
1.	Groundwater Migration Pathway Score (S_{gw})	NI	NI
2a.	Surface Water Overland/Flood Migration Component (S_{of})	100.00	10,000.00
2b.	Groundwater to Surface Water Migration Component (S_{gs})	NI	NI
2c.	Surface Water Migration Pathway Score (S_{sw}) (Enter the larger of lines 2a and 2b).	100.00	10,000.00
3.	Soil Exposure Pathway Score (S_s)	NI	NI
4.	Air Migration Pathway Score (S_a)	NI	NI
5.	$S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2$		10,000.00
6.	**HRS Site Score** (Divide the value on line 5 by 4.0 and take square root)		50.00

Notes:
NI = Score not included because available information suggests the pathway contributes little to overall site score

SOURCE CHARACTERIZATION WORKSHEET

Source: Ford Road Landfill

A. Source dimensions and hazardous waste quantity

Hazardous Constituent quantity: NE

Hazardous Wastestream quantity: 589,330,000 pounds

Volume: NE

Area: 15 acres

Area of observed contamination: NE

B. Hazardous substances associated with the source

Hazardous Substance	Available to Pathway[a]						
	Air		Ground-water (GW)	Surface Water (SW)		Soil	
	Gas	Particulate		Overland/ Flood	GW to SW	Resident	Nearby
1,1-Dichloroethane	NE	NE	Yes	Yes	NE	NE	NE
PCBs	NE	NE	Yes	Yes	NE	NE	NE
Arsenic	NE	NE	Yes	Yes	NE	NE	NE
Barium	NE	NE	Yes	Yes	NE	NE	NE
Calcium	NE	NE	Yes	Yes	NE	NE	NE
Lead	NE	NE	Yes	Yes	NE	NE	NE
Manganese	NE	NE	Yes	Yes	NE	NE	NE
Nickel	NE	NE	Yes	Yes	NE	NE	NE
Zinc	NE	NE	Yes	Yes	NE	NE	NE

Notes:

NE Not evaluated due to lack of information.

[a] Assumption based on existing information. Does not necessarily reflect actual HRS containment values.

GROUNDWATER PATHWAY SUMMARY

Comments **References**

- No background wells were sampled; therefore, no observed release has been established.
- There are no groundwater drinking-water wells in northern Lorrain County. 5
- Because there are no users of groundwater, the groundwater pathway was not scored.
- The potential groundwater target population is:

Distance (Mi)	No. of Residential Wells	No. of Residents per well	No. of Municipal Wells	Population Served by Municipal Wells	Total Population	Ref.
0-1/4	0	0	0	0	0	5
1/4-1/2	0	0	0	0	0	5
1/2-1	0	0	0	0	0	5
1-2	0	0	0	0	0	5
2-3	0	0	0	0	0	5
3-4	0	0	0	0	0	5

SURFACE WATER PATHWAY SCORESHEETS

Comments	References
• An observed release of PCBs, arsenic, barium, lead, manganese, nickel, and zinc has been established through sediment sampling.	
• Toxicity, persistence, and bioaccumulation values are based on PCBs.	2
• Calculation of a hazardous waste stream quantity factor was based on the following wastes disposed of at the landfill:	
B.F. Goodrich 3,290,000 pounds	
Harshaw Chemical 700 tons x 2,000 pounds per ton = 1,400,000 pounds	
General Motors 32,000 gallons per day x 7 years x 261 days per year = 58,464,000 gallons	
58,464,000 gallons x 10 pounds per gallon = 584,640,000 pounds	1, 3, 4, 7, and 8
Total 589,330,000 pounds	
• A surface water intake in Lake Erie serves 76,000 people. Lake Erie has a dilution weight of 0.0001.	1 and 6
• The Black River is a fishery, with production greater than 0 and less than 100 pounds per year.	
• The Black River flows in a narrow gorge for most of its length downstream of the site. The possibility of extensive wetland frontage is unlikely. No wetlands are indicated on USGS topographic maps of the river.	
• A habitat known to be used by a threatened species, *Ichthyomyzon unicuspis*, exists within the 15-mile target distance limit.	9

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET

Factor Catagories and Factors			Maximum Value	Value Assigned	
Drinking Water Threat					
	Likelihood of Release				
1.	Observed Release		550	550	
2.	Potential to Release by Overland Flow				
	2a.	Containment	10	NI	
	2b.	Runoff	25	NI	
	2c.	Distance to Surface Water	25	NI	
	2d.	Potential to Release by overland flow [lines 2a x (2b + 2c)]	500	NI	
3.	Potential To Release by Flood				
	3a.	Flood Containment	10	NI	
	3b.	Flood Frequency	50	NI	
	3c.	Potential to release by flood [lines 3a x 3b]	500	NI	
4.	Potential to Release [lines 2d + 3c]		500	NI	
5.	Likelihood of Release [higher of lines 1 and 4]		550		550
	Waste Characteristics				
6.	Toxicity/Persistance		a	10,000	
7.	Hazardous Waste Quantity		a	10,000	
8.	Waste Characteristics		100		100
	Targets				
9.	Nearest Intake		50	0.002	
10.	Population				
	10a.	Level I Concentrations	b	0	
	10b.	Level II Concentrations	b	0	
	10c.	Potential Contamination	b	0.05	
	10d.	Population [lines 10a + 10b + 10c]	b	0.05	
11.	Resources		5	5	
12.	Targets [lines 9 + 10d + 11]		b	5.052	
13.	**Drinking Water Threat Score** [lines 5 x 8 x 12)/82,500][c]		500		0.03

[a] Maximum value applies to waste characteristics catagory.
[b] Maximum value not applicable.
[c] Do not round to nearest integer.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET (cont.)

Factor Categories and Factors			Maximum Value	Value Assigned	
Human Food Chain Threat					
Likelihood of Release					
14.	Likelihood of Release [same value as line 5]		550		550
	Waste Characteristics				
15.	Toxicity/Persistence/Bioaccumulation		a	$5x10^8$	
16.	Hazardous Waste Quantity		a	10,000	
17.	Waste Characteristics		1,000		1,000
	Targets				
18.	Food Chain Individual		50	20	
19.	Population				
	19a.	Level I Concentrations	b	0	
	19b.	Level II Concentrations	b		
	19c.	Potential Contamination	b	$3x10^{-7}$	
	19d.	Population [lines 19a + 19b + 19c]	b	$3x10^{-7}$	
20.	Targets [lines 18 + 19d]		b		20
21.	**Human Food Chain Threat Score** [lines 14 x 17 x 20)/82,500][c]		100		100

[a] Maximum value applies to waste characteristics catagory.
[b] Maximum value not applicable.
[c] Do not round to nearest integer.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET (cont.)

Factor Categories and Factors		Maximum Value	Value Assigned	
Environmental Threat				
Likelihood of Release				
22.	Likelihood of Release [same value as line 5]	550		550
	Waste Characteristics			
23.	Ecosystem Toxicity/Persistence/ Bioaccumulation	a	$5x10^8$	
24.	Hazardous Waste Quantity	a	10,000	
25.	Waste Characteristics	1,000		1,000
	Targets			
26.	Sensitive Environments			
	26a. Level I Concentrations	b	0	
	26b. Level II Concentrations	b	0	
	26c. Potential Contamination	b	7.5	
27.	Targets [lines 26a + 26b + 26c]	b		7.5
28.	**Environmental Threat Score** [lines 22 x 25 x 27)/82,500]	60		50
	Surface Overland/Flood Migration Component Score for a Watershed			
29.	Watershed Score [lines 13 + 21 + 28][c]	100		100
30.	**Surface Water Overland/Flood Migration Component Score (S_{of})** [highest score from line 29 for all watersheds evaluated][c]	100		100

[a] Maximum value applies to waste characteristics catagory.
[b] Maximum value not applicable.
[c] Do not round to nearest integer.

REFERENCES

1 United States Environmental Protection Agency (EPA). 1990. Hazard Ranking System (HRS) Final Rule, 55 Federal Register 51532 et. seq. (December 14).

2 EPA. 1993. Superfund Chemical Data Matrix, Hazardous Substance Reference Table, Assigned HRS Factor Values. March.

3 BF Goodrich. 1981. Letter Regarding Notification of Hazardous Waste Site Form. From W.E. Horton. To EPA. June 8.

4 Brotherton Disposal, Inc., (Brotherton). 1971. Letter Regarding Plan for Dumping of Solid Waste. From George C. Brotherton. To Gordon Bell, Elyria Health Department. August 9.

5 Desantis, Bob. 1985. Record of Telephone Conversation. Between Bon Desantis, Lorain Municipal Water System and P.S. Woodhouse. Ocober 14.

6 Desantis, Bob. 1986. Record of Telephone Conversation. Between Bon Desantis, Lorain Municipal Water System and Steve Wisbaum. February 11.

7 Gulf Oil Company. 1981. Letter Regarding Notification of Hazardous Waste Site Form. From D.L. Caputo, Coordinator Environmental Affairs. To EPA. June 5.

8 Ohio Environmental Protection Agency (OEPA). 1980. Identification and Preliminary Assessment, EPA Form T2070-2. June 30.

9 Ohio Department of Natural Resources (ODNR). 1993. Letter Regarding Endangered and Threatened Species. From Debbie Woischke, Ecological Analyst. To Alicia Shultz, Biologist, PRC. July 27.

SDMS US EPA REGION V

COLOR-RESOLUTION - 2

IMAGERY INSERT FORM

The following page(s) of this document include color or resolution variations. Unless otherwise noted, these pages are available in monochrome. The original document is available for viewing at the Superfund Records Center.

SITE NAME	FORD ROAD LANDFILL
DOC ID #	148824
DESCRIPTION OF ITEM(S)	PHOTOCOPY OF PHOTOGRAPHS
PRP	RMD - FORD ROAD LDFL
DOCUMENT VARIATION	___ COLOR **OR** __X__ RESOLUTION
DATE OF ITEM(S)	5/18/93
NO. OF ITEMS	18
PHASE	SAS
OPERABLE UNITS	
LOCATION	Box #_1_ Folder #_7___ Subsection _____
PHASE (AR DOCUMENTS ONLY)	___ Remedial ___ Removal ___ Deletion Docket ___ Original ___ Update # ___ Volume ___ of ___
COMMENT(S)	

Photograph No. 1 Location: Southeast corner of the landfill
Orientation: Southwest Date: 03/08/93
Description: Graded access road along southern boundary of landfill.

Photograph No. 2 Location: East-central edge of site
Orientation: East Date: 03/08/93
Description: [illegible] along Black River and monitoring well (MW-2).

Photograph No. 3 Location: Northeast corner of the landfill
Orientation: Southwest Date: 03/08/93
Description: Piles of clean fill from local construction activities, used for cover.

Photograph No. 4 Location: Northeast corner of the landfill
Orientation: North Date: 03/08/93
Description: Riprap covering the underground sewer main is visible. MW-1 and a leachate seep entering the Black River and MW-1 are located in the center of the picture.

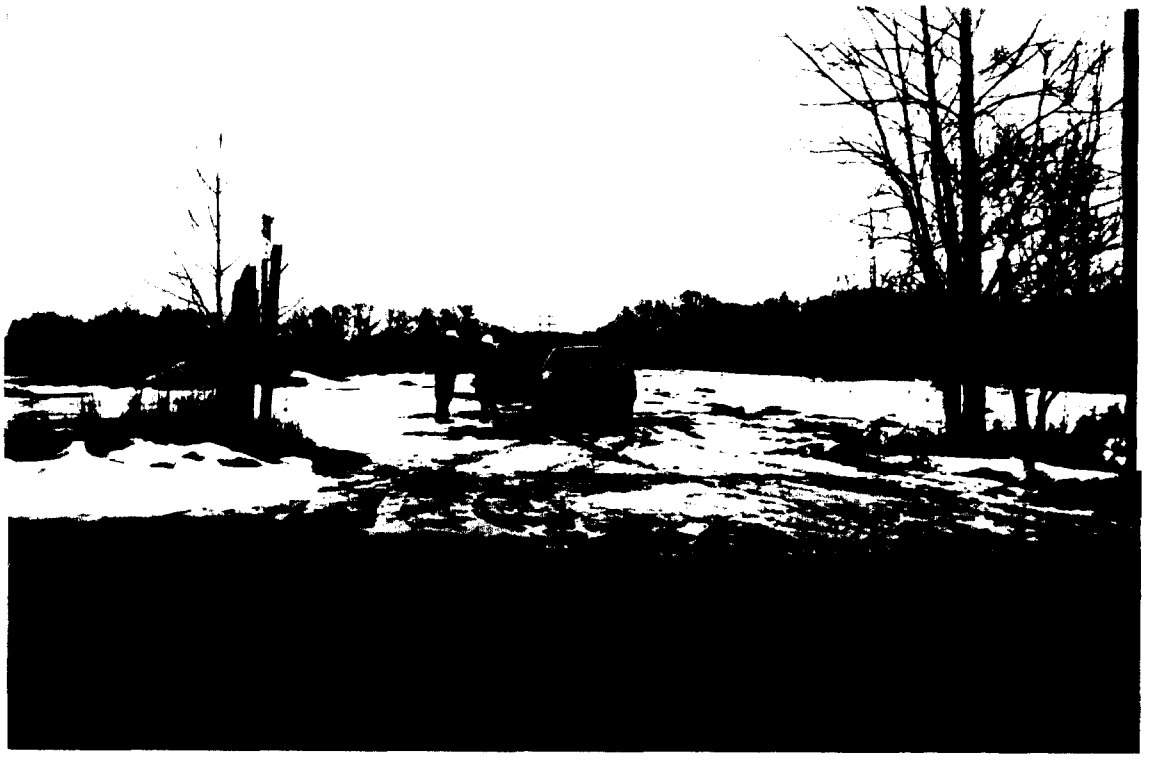
Photograph No. 5 Location: North border of landfill
Orientation: East Date: 03/08/93
Description: Chain barrier along Ford Road. Intermittent stream is to the left in the trees.

Photograph No.: 6 and 7
Orientation: East and south
Description: Panoramic view from the northwest corner of the landfill looking east, then south along Ford Road. Piles of clean fill on left are used as cover.

Location: Ford Road
Date: 03/08/93

Photograph No. 8 Location: Ford Road and riprap
Orientation: East Date: 03/08/93
Description: The sewage pumping station is in background directly across the Black River. The northeast corner of the landfill is visible in the extreme right side of the picture.

Photograph No. 9 Location: Ford Road
Orientation: East Date: 03/08/93
Description: View of the northeast corner of the landfill from the top of the riprap. Note the steep slope.

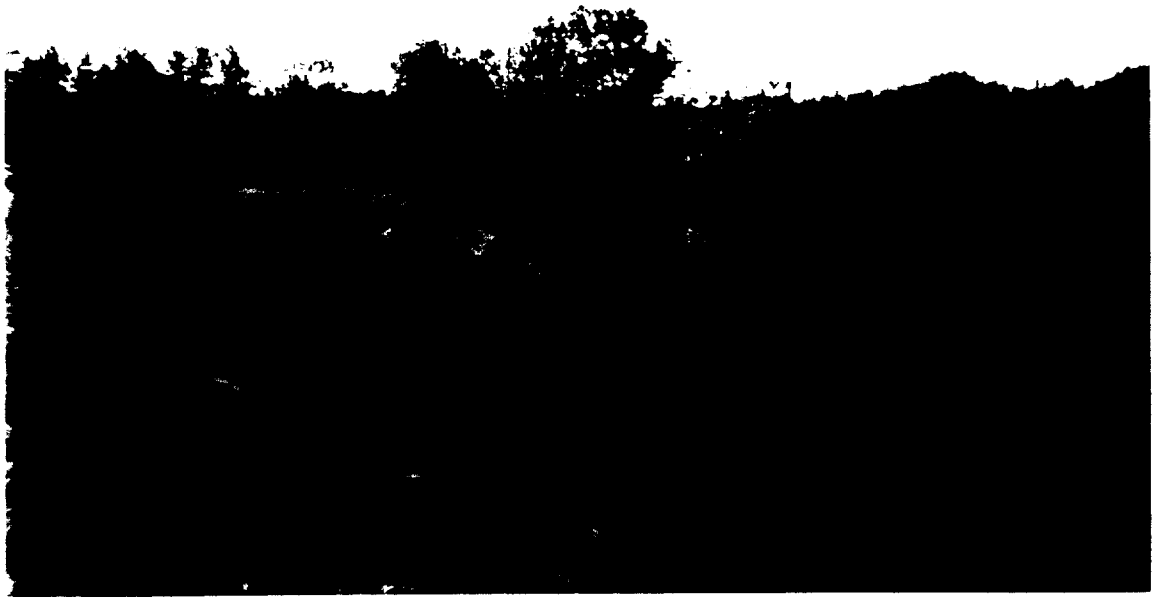


Photograph No. 10 Location: Ford Road
Orientation: East Date: 03/08/93
Description: Entrance to the Ford Road Landfill.

Photograph No. 11 Location: Southeast corner
Orientation: North Date: 05/18/93
Description: Landfill surface.

Photograph No. 12 Location: Southeast corner
Orientation: Northwest Date: 05/18/93
Description: Landfill surface.

Photograph No. 13 Location: Southeast corner
Orientation: West Date: 05/18/93
Description: Landfill surface.



Photograph No. 14 Location: Eastern edge of landfill
Orientation: North Date: 05/18/93
Description: Landfill surface and slope of landfill, with the Black River to the east.

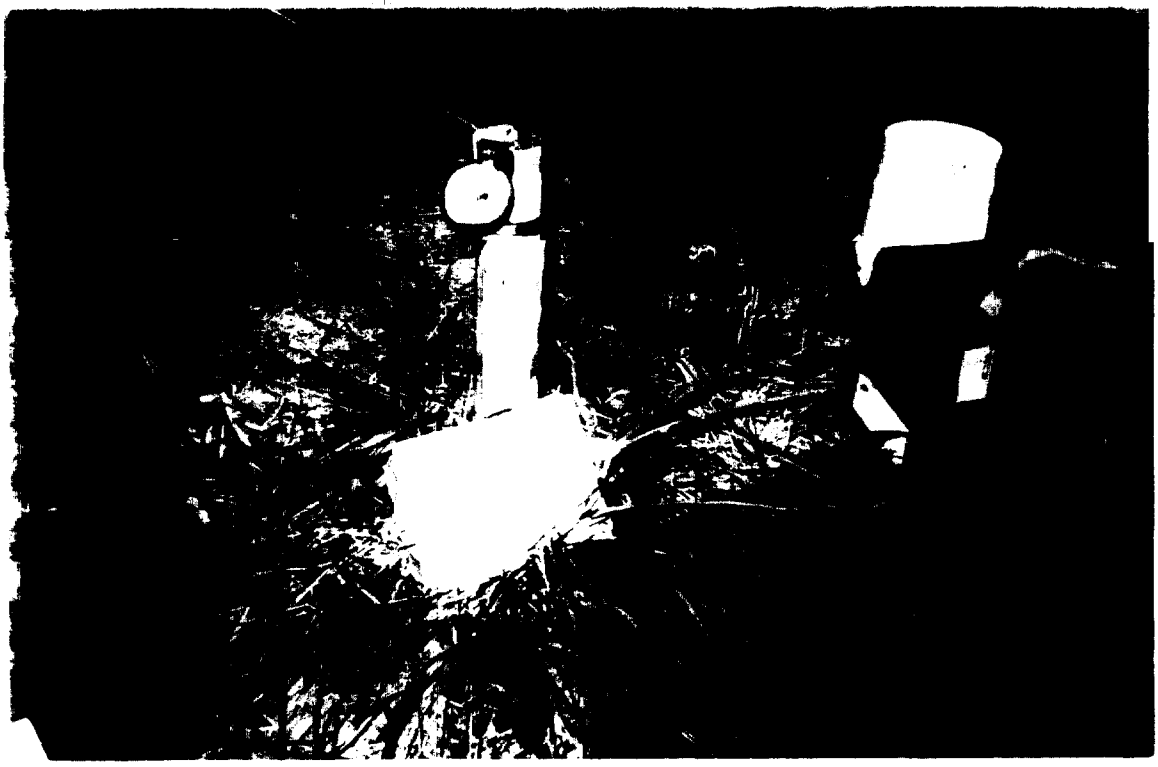
Photograph No. 15 Location: Eastern edge of landfill
Orientation: East Date: 05/18/93
Description: Landfill slope down to the Black River. MW-2 is between the vehicle and the landfill. The island is visible in the background.

Photograph No. 16 Location: Black River
Orientation: East Date: 05/18/93
Description: Black River with sewage treatment plant in background.

Photograph No. 17 Location: Southern boundary of landfill
Orientation: West Date: 05/18/93
Description: Wetland area at the foot of the southern edge of the landfill.

Photograph No. 18 Location: Monitoring well no. 1
Orientation: North Date: 05/18/93
Description: Location of MW-1, with drainage pipe and Black River in the background.

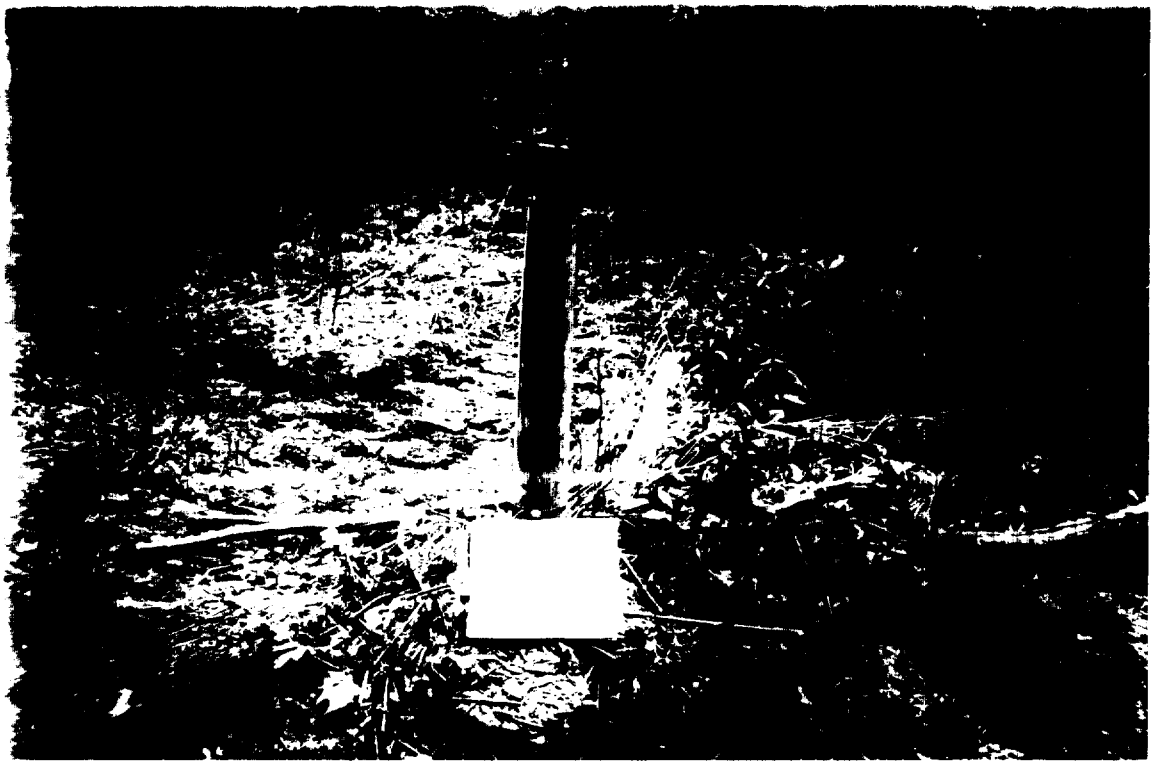
Photograph No. 19 Location: Monitoring well no. 1
Orientation: West Date: 05/18/93
Description: MW-1, with drainage pipe and landfill slope in the background.



Photograph No. 20 Location: Monitoring well no. 2
Orientation: West Date: 05/18/93
Description: Location of MW-2.

Photograph No. 21 Location: Monitoring well no. 2
Orientation: East Date: 05/18/93
Description: Sampling of MW-02.

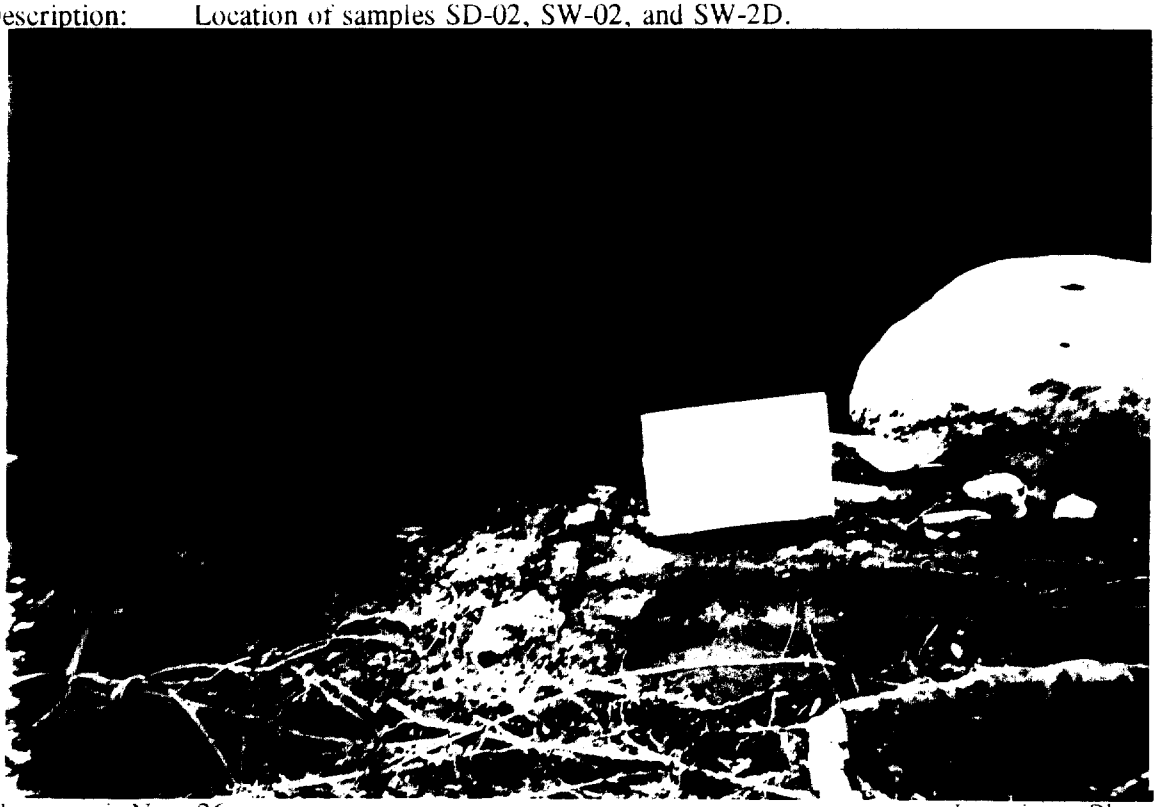
Photograph No. 22 Location: Monitoring well no. 2
Orientation: West Date: 05/18/93
Description: Sampling of MW-02. Note turbidity of water.



Photograph No. 23 Location: Monitoring well no. 3
Orientation: West Date: 05/18/93
Description: Location of MW-3.

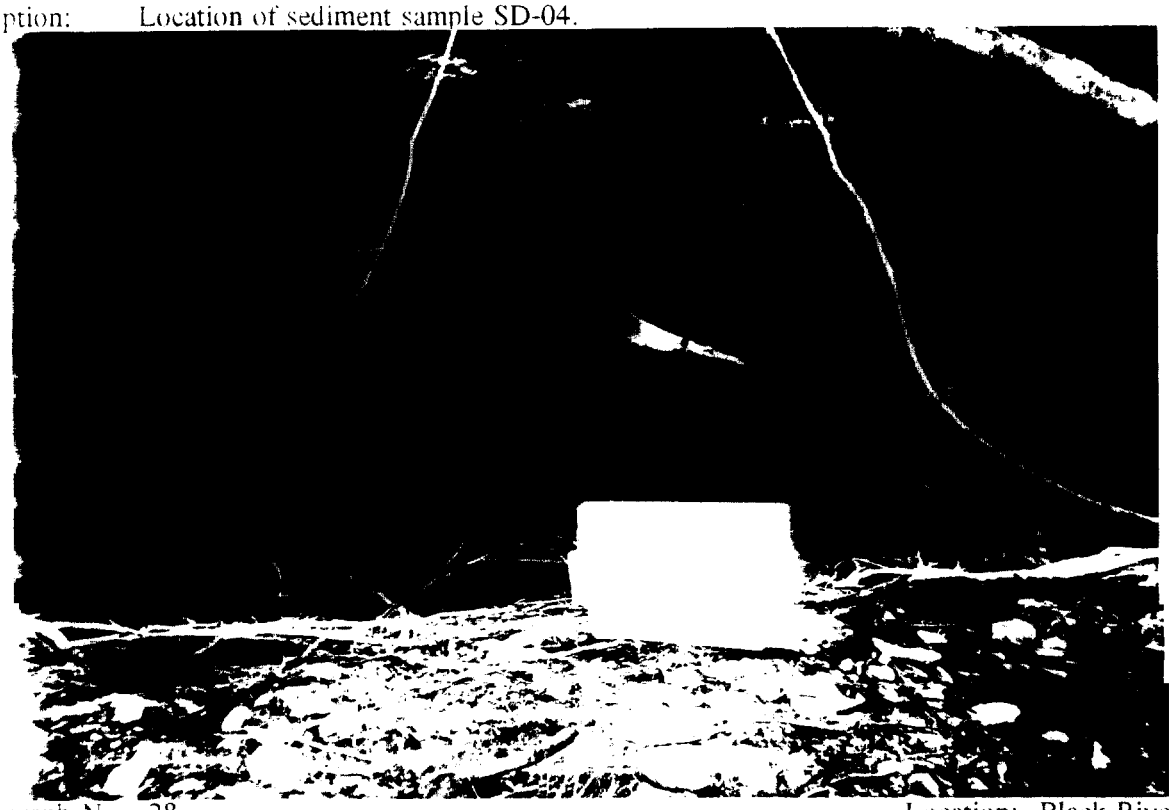
Photograph No. 24 Location: Intermittent stream north of landfill
Orientation: South Date: 05/18/93
Description: Location of soil sample SD-01.

Photograph No. 25 Location: Black River
Orientation: East Date: 05/18/93
Description: Location of samples SD-02, SW-02, and SW-2D.



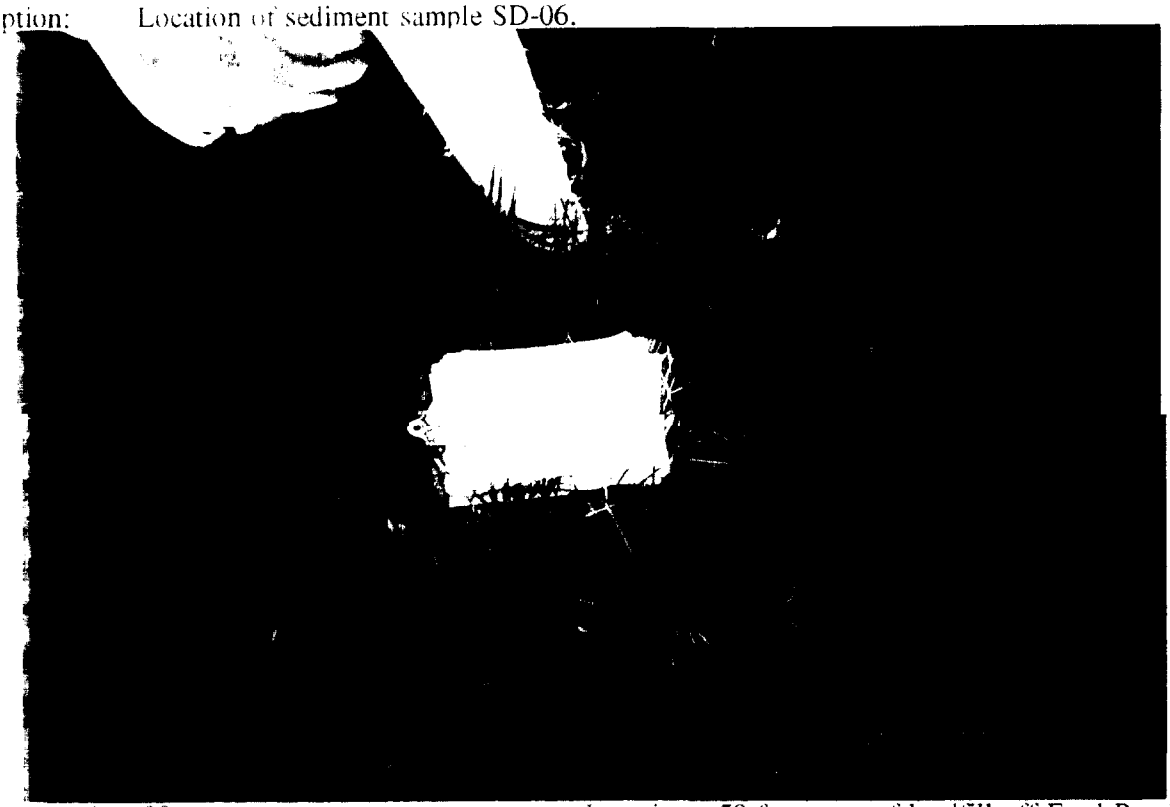
Photograph No. 26 Location: Black River
Orientation: East Date: 05/18/93
Description: Location of sediment sample SD-03.

Photograph No. 27 Location: Black River
Orientation: East Date: 05/18/93
Description: Location of sediment sample SD-04.



Photograph No. 28 Location: Black River
Orientation: South Date: 05/18/93
Description: Locations of sediment sample SD-05 and surface water sample SW-05.

Photograph No. 29 Location: Wetlands
Orientation: West Date: 05/18/93
Description: Location of sediment sample SD-06.



Photograph No. 30 Location: 50 feet west of landfill off Ford Road
Orientation: West Date: 05/18/93
Description: Location of soil sample SD-07.

Photograph No. 31 Location: Leachate seep discharge point
Orientation: North Date: 05/18/93
Description: Location of sediment sample SD-08. Orange sediment is visible in the foreground.

Photograph No. 32 Location: Black River
Orientation: South Date: 05/18/93
Description: Bank of the Black River near SD-08. Note orange-stained sediments at the base of the photo.